The Genealogical Position of Tigre and the Problem of North Ethio-Semitic Unity[1]

By Maria Bulakh and Leonid Kogan, Moscow

Summary: The present contribution discusses the relationship between Tigre and other Ethio-Semitic languages. The necessity of updating and reassessing Robert Hetzron's classification of Ethio-Semitic languages has been recently emphasized by Rainer Voigt. A close consideration of the available linguistic evidence shows that the reconstruction of the development of Ethio-Semitic languages as proposed by Hetzron can indeed be substantially revised. Using Hetzron's method of shared morphological innovations, the authors come to the following conclusion (implicit already in some of Hetzron's works on the subject): Tigre, Geez and Tigrinya do not constitute any special genealogical unity, but are to be treated as closely related idioms whose similarities are to be explained either by their general conservatism or by geographic proximity. Furthermore, a few fundamental isoglosses in the field of the verbal morphology are considered, some of them opposing Tigre to the rest of Ethio-Semitic and thus suggesting that this language was the first to split from the common Ethio-Semitic stock. Conflicting evidence, pointing to a special genealogical proximity between Tigre and the rest of modern Ethio-Semitic as opposed to Geez, is also carefully analyzed.

1. Introduction

Robert Hetzron, in his key work on the classification of Ethio-Semitic (ES) languages (1972), places Tigre together with Geez and Tigrinya and refers to these three languages as Northern Ethio-Semitic (NES), as opposed to Southern Ethio-Semitic (SES). It is important to keep in mind, however, that Hetzron never speaks of NES languages as a genetic unit. In other words, he does not assume that these three languages are descendants of a common ancestor. Admittedly, from the genealogical trees proposed in his works (1972, p. 119, 1977, p. 17, where the tree is introduced as "a genetic classification meant to be a reconstruction of the historical splits that

---

led to the actual languages") one may get the impression that Hetzron did perceive Geez, Tigre and Tigrinya as descendants from a common "North Ethiopic" stock. Nevertheless, while commenting on the genealogy of the Ethiopian languages, Hetzron explicitly states that the NES languages share only archaisms, which, according to his own method, is not sufficient to claim their genetic unity. Indeed, the picture reconstructed by Hetzron (1972, p. 22) is as follows:

> … at a certain moment of history a group split off from the common stock and by developing its own features became independent. The remainder of the Northern stock yielded the three NE [Northern Ethio-Semitic] languages, while the 'dissidents', subjected to further very strong Cushitic influences, split again and again, and evolved into what we now classify as 'South Ethiopic'.

From such a viewpoint, the "NES languages" are simply what remains of the common Proto-ES stock after the splitting. "The remaining Northern-ers", writes Hetzron (1972, p. 123),

> elevated a language that was still quite close to the Proto-Ethiopic pattern to the status of a language of higher culture: Gəʕəz. Other very closely related dialects developed independently. Their northernmost representatives under-went Bedawye influence and yielded Təgre. The southern group, subjected to strong Agaw influence, became Təgrəňňa.

Hetzron's reconstruction is a great achievement and was a truly pioneer-ing work for its time. Nevertheless, it cannot be regarded as the last word in the classification of Ethio-Semitic. Rather, after several decades of intensive research and the accumulation of descriptive information by leading figures of Ethiopian Semitic scholarship, it seems justified to attempt a revision of Hetzron's scheme. Recent criticism of Hetzron's classification by Rainer Voigt (e.g., 2007), however harsh on some occasions, is definitely worthy of consideration, as it provokes a serious re-evaluation of Hetzron's argu-ments and in-depth revision and elaboration of his reconstruction of the history of Ethio-Semitic languages. The results of such an investigation will be of interest not only for linguists, but for (ethno-)historians as well.

In the present contribution, the position of Tigre among Ethio-Semitic languages will be discussed. A few essential questions concerning the classi-fication of Ethio-Semitic remain beyond the scope of this paper, but, before addressing the Tigre question proper, it is necessary to make clear our posi-tion concerning two issues of a more general nature.

1.1. The first one is, paradoxically, the historical unity of Ethiopian Semitic as such. In Cohen's work on Ethio-Semitic classification (1931, pp. 38–52) the possibility of several separate streams of immigrants from South Arabia

has been considered, which would imply the absence of a common Proto-ES stage. A similar view was later held by Fleming (1968, pp. 356, 365), who suggested that NES and SES are descendants of two independent groups of South Arabian immigrants to the North and South of the Horn of Africa respectively. Hetzron rejected this hypothesis and proposed several arguments in favor of the common origin of Ethio-Semitic (1972, pp. 17–19). The most convincing ES innovation suggested by Hetzron is the verb *hallawa which, although conjugated after the paradigm of the perfect, denotes existence in the present (in Geez, also in the past). This important feature is, admittedly, of a lexico-grammatical nature, and a few other shared ES innovations recently discussed in Kogan 2005 also come from the lexical domain. All in all, one has to acknowledge that true morphological innovations shared by all major ES languages are not easy to find (Faber 1997, p. 12). Nevertheless, a few possible examples of such innovations can be offered.

The most convincing isogloss uniting all ES languages is the pattern of *nomen agentis* *ḳaṭāli, gradually replacing the the Common Semitic pattern **ḳāṭil-*. The evidence for the Proto-ES status of this pattern is discussed in detail in section 3.3. of the present contribution, together with the history of the **ḳāṭil-* pattern in ES.

Another specifically Ethiopian feature is to be found in the formation of the *št-stem (the so-called "causative-reflexive"). The stem marker **ʔasta-* is most probably to be analyzed as -*st*- (going back to the combination of the Proto-Semitic causative marker *š- with the reflexive-passive infix **-t-*, Bravmann 1969, pp. 518–519), further augmented with the productive causative prefix *ʔa-*. It is this augmentation, no doubt triggered by the erosion of the original causative meaning of -*s-*[2], that is peculiar to ES and has no parallel outside this group. The main problem with this feature is the narrow distribution of **ʔasta-*, whose reflexes are preserved only in Geez,

---

[2]   This analysis, suggested by T. Nöldeke (*apud* Dillmann 1907, p. 157), is not universally recognized. The most popular alternative is to consider the element *ʔa-* as merely prosthetic (e.g., Brockelmann 1908, pp. 523–524), not unlike Arabic *ʔi- (ʔalif waṣlah)* in *ʔistafʕala*. In this approach, the vowel -*a-* must either remain unexplained (contrary to Brockelmann 1908, p. 213, the prosthetic vowel in Geez is mostly *ə*, v. Dillmann 1907, p. 70), or be attributed to analogy to the causative stem (v. Waltisberg 2001, pp. 10–11, with references to previous studies). Goldenberg (1977, pp. 498–499), while acknowledging that the element *ʔa-* in *ʔasta-*, *ʔan-* and *ʔas-* is "structurally the same as causative *ʔa-*", is apparently not sympathetic to the idea that *ʔa-* is used in order to renew the causative marker **-s-* (indeed, it would be hard to apply such a theory to *ʔan-* given the fact that no causative function can be attributed to the element **-n-*). Whatever the origin of the prefix **ʔasta-* may be, the emergence of such a formative remains an important ES innovation (admittedly somewhat less important if the prosthetic interpretation is endorsed).

Tigre, Tigrinya and Amharic. Moreover, it is only in Geez that it functions as a productive means of verbal derivation. In Tigre and Tigrinya it is registered only in a few verbs: Tgr. ʔastaḥallama 'to blab out dreams' < ḥalma 'to dream', ʔastagdafa 'not to guard' < gadfa 'to throw away' (WTS 53, 603); Tna. ʔastänfäsä 'to breath' (KT 1266). In Amharic, independent usage of astä- seems to be extremely rare (of all the examples quoted in Leslau 1995, p. 490, only one seems to be genuine, viz. astänaggädä 'to receive guests' < ǝngǝda 'guest', v. also K 1068).[3] Should we treat the Modern Ethiopian forms as remnants of a Proto-ES *ʔasta- or as new peripheral formations emerging under the influence of Geez? The former is perhaps more plausible: in both Tigrinya and Amharic *ʔasta-forms are (or were, at a certain period) integrated well enough to develop intransitive counterparts with the prefix tästä- such as Amh. tästänaggädä 'to be accepted, to be a guest'. The absence (or extreme rarity) of *ʔasta- outside Geez may be due to the spread of the prefix ʔat- (and ʔas- in Amharic and Argobba) which took over the functions of ʔasta- in these languages (v. 5.3.).

1.2. The second general issue concerns the SES genetic unit, the existence of which has recently been questioned by Voigt (e.g., 2007). In our view, Voigt's scepticism in this respect is often unwarranted.

One of the principal SES innovations (outlined already in Cohen 1931, p. 26; v. also Polotsky 1938, pp. 143–144, Leslau 1951, No. 14, 1960, p. 91, Hetzron 1972, pp. 22–23, 1977, p. 18), namely, gemination of the second radical in the perfect of the A type, is discarded by Voigt as "not well suited for classificatory purposes". Voigt's main argument is the existence of Gurage forms where gemination is limited to the affirmative, while the negated forms exhibit a non-geminated second radical. In our opinion, the negated forms do not weaken the relevance of gemination in the affirmative perfect forms as a true SES innovative feature. More precisely, one may suppose that in its original form this innovation affected only the affirmative forms.[4] In some SES languages (such as Amharic, Argobba etc.) it eventually spread to the negative forms also, whereas certain Gurage languages preserved the archaic negative forms without gemination (e.g., Muh. *säb-*

---

[3] In the rest of the examples, the prefix astä- appears either as combination of the causative as- and reflexive/passive tä- (astämarä 'to teach' < tämarä 'to learn') or as an allomorph of the causative as- for verbs with initial a- (astawwäḳä 'to inform' < awwäḳä 'to know'). None of the two usages is to be immediately connected with Geez ʔasta-.

[4] To be sure, the same happened with some other SES innovations in the perfect conjugation, such as the emergence of *a after the second radical in quadriradicals, or the front vowel in the same position in the type B (v. section 3.1.). In all these cases – as already observed in Goldenberg 1977, p. 487, fn. 123 – the negative forms resist the innovations in a number of SES languages.

bäräm 'he broke' – *an-säbärä* 'he did not break'). There is however a further consideration which makes this isogloss less convincing, viz. the absence of gemination (in either affirmative or negative forms) in Harari and East Gurage (EGH): Har. *säbära*, Wol. *säbärä* 'to break', Zwy. *däläs* 'to wait'. One cannot *a priori* exclude that EGH did not participate in this innovation (and, therefore, do not form part of the SES unity as outlined above). An alternative solution is, however, at hand: EGH once underwent this innovation, but gave it up in the course of their history. And indeed, EGH are known to give up the morphological gemination of the second radical in the verbal paradigms of *all* verbal stems, including the B-type, where the original presence of gemination is obviously not in doubt (Rundgren 1959, p. 222f., Leslau 1960, p. 98, Hetzron 1972, p. 42–44).[5]

An additional argument in favor of this hypothesis may be found in the conjugation of the **ʔa-*stem in SES (Rundgren 1963, p. 91). When the causative prefix **ʔa-* is attached to verbs of the A type, it is the **-ḳtal-* stem that is used in NES (Tgr. Geez *ʔa-ḳtal-a*, Tna. *ʔa-ḳtäl-ä*), in full agreement with the common Semitic picture. In SES, however, the prefix is combined with the disyllabic **-ḳat(t)al-* base: Amh. *a-däkkämä* 'to exhaust', Har. *a-bäsäl-ä* 'to cook', Čaha Enm. End. Gyt. Sel. Wol. *a-täkäsä*[6], Eža Muh.

---

[5] Admittedly, gemination is not completely absent from any of these languages (Hetzron 1972, p. 43, Meyer 2005, pp. 39–41, 2006, pp. 24–25). As far as the verbal system is concerned, subclasses of geminated verbs are present in all conjugational types in Zway (Meyer 2005, pp. 112–113, 118–119, 122, 125–126, 128). The same is probably valid for Selti, for which Gutt (1997, p. 914) reports geminated verbs of the A type (*rawwaṭa* 'to run') and of the *ō*-type (*ṭōllaba* 'to beg'). In Wolane, only type B has a subclass of geminated verbs (Meyer 2006, p. 58). The geminated verbs in East Gurage may have been reintroduced due to Amharic influence (v. Meyer 2006, p. 54, 2005, p. 105). The EGH picture – loss of "etymological" gemination with its subsequent re-introduction into the phonological system, partly under foreign influence – finds interesting parallels in a few other Semitic languages. Thus, in Turoyo (Eastern Neo-Aramaic) gemination was completely lost in genuinely Aramaic words and forms (Jastrow 1993, p. 17), but is preserved at least on the phonetic level due to a massive influx of loanwords and a few sandhi phenomena in the genuine lexicon (judging by minimal pairs like *ʕamo* 'people' vs. *ʕammo* 'uncle from father's side', it may even have some phonemic load). In Modern South Arabian, gemination is lost in two major areas of verbal morphology (formation of the "long" imperfect and derivation of the intensive stem) as well as in some archaic primary nouns (Jibbali *ʔɛm*, construct state *ʔɛmɛ́* 'mother', Johnstone 1980, p. 62), but keeps its presence in the phonological system thanks to verbal forms from geminated roots, various types of internal sandhi etc. (v. Johnstone 1980, Lonnet/Simeone-Senelle 1997, pp. 356–360, Lonnet 1993, pp. 51–52). It remains to be investigated to what degree gemination is lost (or preserved) in other domains of Harari grammar and lexicon (v. Wagner 1997, p. 487, where "archaic relics" of gemination in nouns are mentioned, such as *gabbār* 'vassal' or *dällāgi* 'worker').

[6] In Čaha, Ennemor, Endegeñ, Gyeto, *k* is a regular reflex of geminated **kk* (Hetzron 1977, pp. 15–16).

Msq. Gog. *a-täkkäsä* 'to ignite' (Cohen 1931, p. 24, Leslau 1951, No. 18, 1956b, pp. 114–115, 1960, pp. 91–92). There are good reasons for believing that the introduction of **-a-* before the second radical in SES was triggered by the change in the structure of the basic stem: as soon as **ḳatala* shifted to **ḳattala*, the derived stem underwent an analogous change from **ʔaḳtala* to **ʔaḳattala*. If this explanation is correct, one has to assume that degemination of the second radical in both simple and causative stems in EGH is secondary and relatively recent. The whole process can be reconstructed as follows:

	Proto-ES		Proto-SES		Proto-SES		Proto-EGH
simple stem, type A	**ḳatala*	>	**ḳattala*	>	**ḳattala*	>	**ḳatala*
*ʔa-stem, type A	**ʔaḳtala*		**ʔaḳtala*		**ʔaḳattala*		**ʔaḳatala*

Gemination in the simple and causative stems of the A type is not the only SES innovation. Several other linguistic features suggesting a clear-cut separation of these languages from the rest of ES can be detected and have indeed been suggested in previous scholarship.

Thus, the emergence of **-e-* in the perfect conjugation of the B type in all SES (outside of SES it appears only in the imperfect, v. section 3.1.) is an important SES innovation whose relevance, earlier emphasized by Leslau (1951, No. 16)[7] and Hetzron (1972, pp. 22–23), is duly recognized in a recent study by Hudson (2007).

Another convincing SES isogloss, suggested already by M. Cohen (1931, p. 25), is the insertion of *-ä-* after the second root consonant in quadriradical verbs. This feature, which received due attention from Leslau[8], is shared by all SES languages (Amh. *mäsäkkärä* 'to testify', Har. *giläbäṭä*[9] 'to invert', Wol. *dənäbäṭä* 'to be frightened', Sod. *mənäzzärä* 'to change money', etc.), being absent from NES (Tgr. *barzaga* 'to tear out, to throw down', Geez *dangaḍa* 'to be terrified', Tna. *mäskärä* 'to testify'). The gradual spread of this innovation is illustrated by such Gurage languages as Muher, Mesqan and Gogot, where *-ä-* is present in the affirmative form only (Muh. *məsäkkäräm* 'he testified' vs. *am-mäskärä* 'he did not testify'). The vowel *-ä-* in the perfect con-

---

[7]   Where, however, this feature is not traced back to Proto-SES level, being treated rather as an independent development in individual SES languages (v. also Leslau 1960, pp. 91, 93).

[8]   Cf. Leslau 1951, No. 20, 1960, p. 91. For a detailed analysis of the quadriradical paradigm in ES and beyond v. Gensler 1997.

[9]   The change of the first vowel in Harari and Gurage is likely to be explained as vowel reduction (v. Gensler 1997, p. 241). For *-i-* in place of a historical *-ə-* in Harari v. Garad/Wagner 1998, pp. 163–164.

jugation was probably taken over from the imperfect paradigm (for a similar view v. Gensler 1997, p. 239), more or less in the same way as the previous innovation (cp. fn. 4; in Goldenberg 1977, p. 487 both features are viewed as the result of a more general SES innovation, namely, "the encroachment of the imperfect bases on the forms of the perfect, in the affirmative").[10]

Furthermore, one can hardly disregard the innovative prefix *lV- in the 1 pers. sg. of the jussive in all SES languages (Amh. *ləsbär*, Har. *näsbär* < *lasbar*[11], Wol. *läsbär* 'let me break', Gaf. *ləltäm* 'so that I arrive', Sod. *näsfər* < *läsfər* 'let me measure', etc.) as opposed to the archaic *ʔə-* in the rest of ES (Tgr. *ʔəsbar*, Geez *ʔəsbər*, Tna. *ʔəsbär* 'let me break').[12] Admittedly, the specifically SES nature of this isogloss is undermined by the fact that the element *l-* as part of the 1 sg. prefix of the jussive is registered also for all MSA except Harsusi (Simeone-Senelle 1997, p. 405, v. Huehnergard 1983, p. 585, Marrassini 2006, p. 228).

Let us mention, finally, the malefactive suffix *-b-*, shared by all SES languages (Amh. *färrädä-bb-əññ*, Wol. *färädä-ḵ-əñ*, Gaf. *färädä-b-äy* 'he judged to my detriment', Enm. *säpär-ḵä-kä* 'I broke to your (m. sg.) detriment', etc.).

In view of these arguments, we hold the existence of SES as a genealogical unity to be a tenable hypothesis at least.

---

[10] An alternative, less likely, explanation would be a straightforward analogy with the perfect of the triradical A type (as observed in Gensler 1997, p. 240).

[11] Cp. Ancient Harari forms *lilmad/lalmad* 'I may learn' (Wagner 1997, p. 497).

[12] It seems wise to distinguish between the presence of *lV-* in the *first* person of the jussive as a specific feature of SES and its presence in the *third* person of the jussive (as well as the imperfect), which does not seem to be relevant for genetic subgrouping: on the one hand, it is not ubiquitous in SES; on the other hand, it is also present in NES languages. Traces of *lV-* in 3 sg. masc. of the jussive (namely, the prefix *yä-* < *lä-yə-*, v. Wagner 1968, pp. 210–212, Hetzron 1977, pp. 79–80) can be found in all SES languages except for Amharic and Argobba: Har. *yäsbär* 'let him break', Gaf. *yältäm* 'so that he arrives', Sod. *yäsfər* 'let him measure', Čaha *yäsṭər*, Enm. *ästər* 'let him break' vs. Amh. *yəsbär* 'let him break', Arg. *yəsdäb* 'let him insult'. The presence of *lV-* in 3 sg. masc. of the jussive may be regarded either as a common SES feature lost in Amharic-Argobba or as an innovative trait in the rest of SES. One can surmise that the same element *lV-* is behind the 3 sg. masc. prefix in Tigre, which appears in the jussive of all verbal stems (*ləḵtal* 'let him kill') and in both the jussive and the imperfect of in the derived stems (*laḵattəl* 'he makes kill', *laḵtəl* 'let him make kill'). The imperfect of the simple stem, as is well known, has no prefix at all (*ḵattəl* 'he kills'). The element *-l-* as an element found in the jussive prefixes is obviously related to the volitive particle *la-* in Geez (v. Huehnergard 1983, pp. 579–580, Wagner 1968, pp. 210–212 for this comparison as well as for the traces of the element *l-* in SES and the MSA parallels; see further Hetzron 1977, pp. 78–79, Murtonen 1967, pp. 42–43). In that language, however, there is no fusion of this element with any of the jussive prefixes: it may rather be optionally combined with them (Geez *la-ʔəsbər/ʔəsbər* 'let me break', *la-yəsbər/yəsbər* 'let him break', *la-təsbər/təsbər* 'let her break'). The 3 sg. masc. jussive with *l-* is also registered in Mehri and Soqotri (Simeone-Senelle 1997, p. 405).

2. The North Ethio-Semitic hypothesis

We now turn to the main problem of the present contribution, namely: is there a specific North Ethio-Semitic genealogical unity comprising those ES languages which cannot be classified as Southern ES according to the criteria mentioned above? As long as we believe that shared innovations are the main criteria for establishing genealogical unities, we have to admit that no reliable criteria of this type have been ever proposed as far as the hypothetic NES unity is concerned. Indeed, the common features of Tigre, Tigrinya and Geez are, as a rule, archaic, not innovative – as was seen already by HETZRON. To the best of our knowledge, only two putative innovations shared by Tigre, Tigrinya and Geez have formerly been suggested.

The first one is gemination of the second radical in the imperfect as opposed to the non-geminate second radical in SES (HUDSON 2007, following CANTINEAU 1932, p. 182, fn. 2, and LESLAU 1953). However, the innovative character of gemination in this case is at best questionable (v. GREENBERG 1952, HETZRON 1972, pp. 24–25, 1977, p. 23, VOIGT 1990, to name just a few advocates of its archaic character), and cannot be considered as an argument solid enough to postulate the historical unity of NES.

The second feature shared by Tigre, Geez and Tigrinya is the generalization of the particles *ʔay-/ʔi-* as negative markers for all verbal forms as well as for nouns (FABER 1997, p. 12). However, it remains to be established whether this feature is innovative in comparison to Proto-ES, or, on the contrary, close or identical to it.[13] At present, it seems that the only certain reflex of *ʔay-/ʔi-* in SES is preserved in the negative forms of the verb of location *hallawa (Amh. *yälläm* etc.). Elsewhere, the markers of negation in SES go back to **ʔal-*, marginally attested in NES as well (*ʔal-a-bu/ʔal-bo*, the negative forms of *bu/bo* 'there is', in Tigre and Geez respectively; Tna. *ʔal-bo-n* 'there is not'). Both *ʔay-/ʔi-* and *ʔal-* have Semitic cognates outside ES (v. CDG 1 and 17 respectively) and, accordingly, are to be reconstructed for Proto-ES. Any sort of functional distribution is, unfortunately, rather hard to elicit. Several possibilities may be considered, none of which presupposes any particularly high significance for the generalization of **ʔay-/*ʔi-* in Geez, Tigre and Tigrinya. For instance, it may be suggested that in Proto-ES **ʔay-/*ʔi-* was used with verbal forms, whereas **ʔal-* was employed to negate nouns and other parts of speech. In this case, the generalization of **ʔay-/*ʔi-* might be regarded as a relatively trivial phenomenon occurring

---

[13] The distribution of the negation markers *ʔay-, ʔi-* and *ʔal-* has been treated by HUDSON (2003). A critical revision of his hypothesis will be proposed in a forthcoming article by MARIA BULAKH.

independently in each of the three languages[14] (incidentally, generalization of *ʔal- in SES – a process far more specific – could be regarded as a further innovative isogloss uniting these languages).

3. Alternative patterns of ES classification

In the absence of tenable arguments for the unity of NES, a natural question arises: are Geez, Tigre and Tigrinya equally distant from SES, or is there a certain hierarchical relationship between these four linguistic entities? Such a hierarchy can only be established if one discovers some innovative linguistic features which are shared by some of them but missing from some others.

A search for such features, provisionally restricted to verbal morphology, has yielded the following results.

3.1. Front vowel after the first radical in the imperfect B

In most of ES languages, the imperfect conjugation of the B type has the vowel *-e- after the first radical: Geez yǝfeṣṣǝm 'he finishes'. In SES, there is clear evidence for the presence of this vowel: Arg. yǝneggǝd 'he trades', Har. yišīmqi 'he hides', Wol. yiʔēstǝ 'he splices', Sod. yǝzibbǝr 'he returns', Čaha yǝfenǝr 'he tears off a small piece'. In all *Gunnän*-Gurage languages other than Soddo, this vowel surfaces only in verbs with non-palatalizable first and second radicals (Msq. yǝbettǝn 'he disperses'), being otherwise reflected in palatalization (Msq. yǝšäkkǝt 'he makes, works'). As already observed above (section 1.2.), in SES this feature has also penetrated into the affirmative perfect conjugation: Wol. ḳēsätä, Sod. zibbärä, Msq. bettänä, šäkkätä.

Amharic is the only SES language where no traces of *-e- can be observed either in the perfect or the imperfect: fällägä 'to seek, want' – yǝfälləg. However, the well-known statistical analysis carried out by Leslau (1957) showed an unusually high number of verbs with initial palatal consonants

---

[14] One might argue that, within such a paradigm, the preservation of *ʔal in one and the same environment (*ʔal-bo) in Geez, Tigre and Tigrinya still looks suspiciously like a specific feature uniting these languages and opposing them to SES. This reasoning is flawed by the fact that this isogloss is also shared by Gafat: alläb-am 'there is no' (Leslau 1956, pp. 81–82; -am is the new negative suffix imposed upon the old, desemantised negative construction; gemination of l must be secondary in Gafat, cf. Leslau 1956, p. 24). Most probably, *ʔalbo was lexicalized already in Proto-ES, being treated as a single, nonsegmentable negative particle. Indeed, the unique development in Tigrinya, where the form *ʔalbo was at first augmented by a new negation marker yä-…-n (> yä-lbo-n 'there is no') and then underwent metathesis of b and l, with l re-analyzed as a benefactive suffix (> yä-billu-n 'he has not') is hard to conceive unless such lexicalization is assumed as its previous stage.

among Amharic verbs of the B type. This analysis allowed Leslau to reconstruct the palatalizing element *-e- in both perfect and imperfect which, after having triggered palatalization, shifted into ä, subsequently extrapolated also to the verbs with non-palatalizable radicals.

Now, what about the presence of this feature in Geez, Tigrinya and Tigre? As already mentioned, in Geez it is regularly attested.

In Tigrinya, the vowel -ə- of the imperfect of the B type has often been regarded as going back to *-e- (v., e.g., COHEN 1931, p. 25, LESLAU 1951, fn. 81, VOIGT 1990, p. 14).[15] Indeed, the irregular shift from *-e- to -ə- could be explained by the weakness of phonemic opposition between ä and e in Tigrinya: in quite a number of lexemes they are interchangeable. The shift from e to i, with a subsequent shortening into ə, would then be due to the necessity to preserve a distinct formal opposition between the A and B stems. In such conditions, it would be interesting to find in Tigrinya a palatalizing effect on the first consonant similar to that discovered by Leslau for Amharic.

A statistical analysis of A and B types in verbs with palatals as the first radical provides no definite argument in favor of the reconstruction of *-e-, but does not exclude such a possibility either. In the following chart, the results of this analysis, based on the *Tigrinya-English Dictionary* by TH. L. KANE (KT), are presented:

Type / Initial consonant		A	B
Non-palatal	s	85	78
	ṭ	33	34
	ṣ	41	25
	g	46	41
	gʷ	36	18
	d	33	45
Palatal	š	26	37
	č	13	23
	ǧ/ž[16]	5	13

---

[15]   For a contrary view v. POLOTSKY 1949, p. 38, n. 11, refuted in LESLAU 1951, fn. 81. One of POLOTSKY's main arguments, namely the presence of the vowel -ə- also in the tä-stem of A type in Tigrinya, is implicitly rejected by WAGNER (1968, pp. 207–208), who convincingly demonstrates that elements of the B type imperfect paradigm are frequently used in t-stems of the A type throughout ES.

[16]   Only one verb with ž- was found.

As one can see, verbs with initial palatals do actually show a preference for the B type (altogether, 44 verbs of the A type with initial palatals have been found, as opposed to 73 verbs of the B type). However, these figures are certainly less convincing than those obtained for Amharic, where the distribution between A and B types among verbs with initial palatals is 5:39 (Leslau 1957, pp. 482–483).

Verbs with initial non-palatal consonants provide no clear evidence in favor of the hypothesis in question: the number of B type verbs among them is comparatively high, approximately equal to the number of A type verbs. Interestingly, a similar picture is observed also in Amharic.

Probably, an analysis in which special attention is paid to possible borrowings will allow more definite conclusions. At present, one can state that the distribution of the A and B types among verbs according to their initial consonant does not exclude the presence of a palatalizing element, even if in a very early stage of the development of Tigrinya. One can also argue that the difference between the statistical distribution of the A and B verbs in Tigrinya as opposed to Amharic is a natural result of the difference in the paradigm of the B type verbs in these languages. In Amharic, as elsewhere in SES, the palatalizing vowel can be detected in both the perfect and the imperfect: *ṭellämä – *yəṭelləm > čällämä – yəčälləm. Conversely, in Tigrinya the hypothetical front vowel can be reconstructed for the imperfect paradigm only (where it later shifted to ə): bäddälä – *yəbeddəl > bäddälä – yəbəddəl. Accordingly, for roots with palatalizable first radicals, generalization (or paradigmatic leveling) would be possible both ways in Tigrinya: *sällälä – *yəšelləl (< *sällälä – *yəselləl) 'to spy on' could yield both *šällälä – *yəšəlləl and *sällälä – *yəsəlləl, unlike Amharic where the palatal was inevitably present in both the perfect and the imperfect. Whereas the actual number of doublets similar to šälälä/sälälä is very low in Tigrinya, one should not exclude the possibility that part of the B type verbs in Tigrinya did opt for the second, "non-palatal" alternative (*sällälä – *yəsəlləl), which would account for an approximately equal number of B type verbs with palatals and non-palatals as first radical.

There is no evidence for the presence of *-e- in Tigre[17]: sammara – yəsammər (impf., juss.) 'to nail' (Raz 1983, pp. 55–56). The proportion between type A and type B is approximately the same for the roots with initial

---

[17] Voigt (1990, pp. 14–15) holds that in Tigre a shift e > ä took place, but offers no arguments in favor of this reconstruction. Such a shift becomes all the less likely in view of the fact that ä in Tigre is an allophone of a and, according to Raz 1983, p. 9, n. 6, is pronounced as a central rather than front vowel. It thus can hardly be viewed as phonetically close to e.

palatalized and non-palatalized consonants as shown by the following data from the dictionary by Littmann and Höfner (WTS):

Initial consonant	Type	A	B
Non-palatal	s	55	28
	ṣ	32	12
Palatal	š	58	28
	č	20	6

As long as we agree that *-e- should be reconstructed for the imperfect paradigm of the B-type in Tigrinya, we can accept that this innovative isogloss unites Tigrinya, Geez and SES as opposed to Tigre.

3.2. Converb *ḳatīl-

Converb is a special grammatical category found in all ES languages except for Tigre. Its emergence has been attributed to the substrate influence of Cushitic (Tosco 2000, p. 345), although a few parallels between this category and the use of the infinitive as a subordinate verbal form in ESA, Ancient Hebrew and some modern Aramaic languages have been observed (Kapeliuk 1997).

Morphological exponents of this category in ES are not uniform.

By far the best known type is represented by the base *ḳatīl-, to which possessive (or similar to possessive) suffixes are attached: Geez ḳatilo, Tna. ḳätilu '(he) having killed'. These forms can hardly be separated from the converb forms in Amharic, Argobba and Gafat, which, however, use the base ḳat(ə)l-: Amh. säbro, Arg. säbrədo '(he) having broken'[18], Gaf. ḳärəššä

---

[18] The element -d- is usually compared to -t- in Amharic converbs of the type sämto < sämma 'to hear' (v. Leslau 1960, p. 96). The Amharic form goes back to *säməʕo, the non-etymological -t- functioning as a sort of "consonantal glide" filling the hiatus which emerged after the fall of the laryngeal. This may be not the only such example in the Ethiopian domain: consider *-tāt as the allomorph of the plural ending *-āt for nouns ending in a vowel in Tigre and Tigrinya (Tgr. mantalle-t-āt 'hares', Raz 1983, p. 17; Tna. ʕasa-t-at 'fishes', Leslau 1941, p. 31) and a similar phenomenon in the formation of the singulative in Tigre (wagre 'olive trees' > wagre-t-at 'an olive tree', Raz 1983, p. 15). Furthermore, the allomorphy of the endings -o vs. -ot in Geez infinitives may have been, in its original form at least, distributionally conditioned, the t-form appearing before pronominal suffixes and the o-form elsewhere (in a less strict form, such a distribution seems to be actually attested in the sources as can be inferred from Dillmann 1907, p. 269–270). For still another possible case v. section 5.3. All this is of course reminiscent of I. J. Gelb's theory about -a- (rather than -t-) being the feminine marker in Proto-Semitic (Gelb 1969,

'(I) having begun' (v. Cohen 1931, p. 32, Hetzron 1972, pp. 100–101).[19] In view of the considerable similarity in conjugation (notably, the use of possessive suffixes as person/gender/number markers), it seems reasonable to treat the base *ḳat(ə)l- as derived from a more archaic *ḳatīl- (v. especially Cohen 1939, p. 163). This is why we shall refer to all these forms as *ḳatīl-converbs.

In view of the fact that the *ḳatīl-converb in Gafat has been considered an Amharism by Leslau, it may be argued that this pattern is not widespread enough to be considered a truly Proto-ES feature. However, the case for the Proto-ES status of the *ḳatīl-converb is strengthened by the existence of a probably related formation typical of Central and Peripheral Western Gurage. In these languages, converbs (commonly known as t-converbs) are formed from the base of the jussive with an infixed -i- before the final radical (or palatalization of the final radical), to which the suffix -tä- and the suffixes of the perfect are consecutively attached. This infixed -i- is often thought to be related to *-ī- of the *ḳatīl-converb (Hetzron 1972, pp. 103–105, 1977, p. 97); moreover, the element -t- in Gunnän-Gurage has been tentatively compared to -d- in Argobba by Hetzron (1972, p. 104, but v. also ibid. pp. 136–137, n. 76). Nevertheless, a diachronic relationship between *ḳatīl-converbs and t-converbs is far from universally acknowledged (Goldenberg 1977, pp. 466–468).

None of these two types of converb is related to the third one, formed from the finite verbal forms (imperfect, perfect or even jussive) by attaching a special non-conjugated suffix, which is attested in Harari, Zway, Selti, Wolane, Gafat (in the latter, alongside the *ḳatīl-converb, v. above), Gunnän-Gurage (in the Peripheral and Central Western Gurage alongside the t-converb). This third type is called "syntactical" by Goldenberg (1977, p. 491, as opposed to two "morphological" types), and can indeed be traced to syntactical constructions consisting of a finite verbal form and a coordinating conjunction[20]. However, the synchronic descriptions usually interpret the elements attached to the verbs as suffixes rather than independent conjunctions. Conversely, the construction with ka- in Tigre, adduced by Goldenberg as an "analogously functioning syntagm", is synchronically analyzed as a combination of verb and coordinating conjunction, not

---

pp. 34–34, 74–75), and it may be observed that the Ethiopian evidence presented here looks considerably more suitable for comparison than Gelb's French examples such as *donne-t-elle*, so justly criticized by his reviewers (e.g., von Soden 1970, p. 204).

[19] The base *ḳatīl- is presumably identical to the widespread Proto-West Semitic adjectival pattern ḳatīl- (Fox 2003, pp. 190–191).

[20] Cf. also the dialectal Amharic converb *säbbärä-nna* (Goldenberg 1977, pp. 491, 495; Leslau 1995, p. 898).

as a special verbal form. Admittedly, Raz (1977, pp. 160–162, 1983, p. 73) does report special constructions for Tigre in which the verb followed by *ka-* behaves in a way similar to converbs: *kāynat ʔət ʔənta tarfat kahallet* 'she remained treacherous', lit. 'she remained and is treacherous', where the combination *tarfat kahallet* with the perfective meaning reminds us of the widespread combinations of converbs and existential verbs in the rest of ES. One has to remember, however, that *ka-* is not the only conjunction with this function mentioned by Raz (thus, the subordinate conjunction *ʔəndo* is employed in similar constructions: *həta bəzuḥ ʔəndo ʔabbarat ṣanḥat* 'she had been very old'). The description given by Raz suggests that the process of grammaticalization of the conjunctions, which would result in a morphological category of converb, is not complete. Further research is necessary to make a definite statement concerning converb-like formations in Tigre.

In any case, presence vs. absence of converb as a special grammatical category is a typological feature with no relevance for genealogical classification. Nevertheless, if one assumes that the **ḳatīl-*-converb is indeed related to the *t*-converb and that the infixed **-ī-* shared by these two types of forms is a true Proto-ES converb marker, one has to treat this feature as a common ES innovation. As we have seen, continuants of these two types are found in Geez, Tigrinya, Amharic, Argobba and Gafat on the one hand, and in Central and Peripheral Western Gurage, on the other. As long as we regard the infixed **-ī-* as an archaic feature, we can plausibly explain its absence from the rest of the SES languages through the spread of the third, "syntactical" type of converb, which in some languages (Gafat, Central and Peripheral Western Gurage) co-existed with the archaic type, but ousted the old one elsewhere (EGH, Soddo, Gogot, Muher, Mesqan). In such a framework, absence of the archaic converb in some SES languages is to be interpreted as a relatively recent loss. Conversely, the absence of the **-ī-*-converb in Tigre may be quite meaningful: given the fact that no special grammatical category of converb is present in this language,[21] one may conclude that Tigre simply did not participate in this ES innovation.

3.3. Loss of the active participle/nomen agentis **ḳātil-*

In ES, only Tigre preserves **ḳātil-* as a productive pattern of the active participle: *sārəḳ < sarḳa* 'to steal'. Thus, the old function of this pattern is completely lost in Geez where **ḳātil-* is only attested in ordinal numerals (*śāləs*

---

[21] The syntactical constructions with *ʔəndo* and *ka-* discussed above seem to be peripheral and can hardly be regarded as innovative devices replacing the archaic converb. Rather, they probably illustrate a gradual penetration of the areal feature until recently absent from this language.

'third') and a handful of adjectives (*ṣādǝḳ* 'just, righteous', *rātǝʕ* 'upright', PRAETORIUS 1886, p. 90, DILLMANN 1907, pp. 229–230). In the rest of ES, the few attested forms traceable to this pattern – Tna. *ṣadǝḳ* 'just, righteous', *ḥaṭǝʔ* 'sinner' (LESLAU 1941, p. 18), Zwy. *ṭadiḳ* 'just, righteous' (MEYER 2005, p. 238), etc. – have probably been borrowed from Geez.

The loss of the pattern **ḳātil-* in most ES languages is to be connected with the emergence of a new form of *nomen agentis*, namely, **ḳaṭāli* (v. LITTMANN 1899, pp. 88, 90, BROCKELMANN 1908, p. 577; COHEN 1931, p. 33, LESLAU 1960, p. 92, HETZRON 1972, p. 21).[22] This pattern, whose origin remains somewhat uncertain,[23] is clearly attested in Geez and Tigrinya, where it functions as a productive means of derivation: Geez *faṭāri* 'creator' < *faṭara* 'to create', Tna. *nädaḳi* 'mason' < *nädäḳä* 'to build'. References to its use as a regular means of forming participles/nouns of agent can also be found in the descriptions of Argobba (LESLAU 1997, p. 55) and Selti (GUTT 1997, p. 930): Arg. *sädabi* < *säddäba* 'to insult', Sel. *harāmi* < *harama* 'to spend (part of) the year'. In Amharic, Wolane and Zway the corresponding forms are described as representing a non-productive type of *nomina agentis*: Amh. *säraḳi* 'thief' < *särräḳä* 'to steal',[24] Wol. *räwāč* 'runner' < *räwäṭä* 'to run' (MEYER 2006, pp. 143–144), Zwy. *ʔarāši* 'peasant' < *ʔaräs* 'to plough' (MEYER 2005, pp. 238–239). A similar status is probably to be ascribed to the *ḳät(t)āli* pattern in Harari: *dällāgi* 'worker' < *däläga* 'to work', *dällāḥi* 'sinner' (EDH 56; already in Ancient Harari, v. WAGNER 1983, pp. 184, 282) < *däläḥa* 'to sin', *wärāši* 'heir' < *wäräsa* 'to inherit'. In most of the aforementioned languages this pattern, with necessary modifications, is also used for *nomina agentis* of the derived stems: Geez *taḳabbāli* < *taḳabbala* 'to accept', Amh. *mälalaš* < *mälalläšä* 'to do something several times, do repeatedly'.[25]

---

[22] Already LITTMANN (1899, p. 88; v. also BROCKELMANN 1908, p. 577, BERGSTRÄSSER 1963, p. 122) compared Amharic and Tigrinya **ḳaṭāli* with Tigre **ḳaṭāl* and considered this feature a "speziell äthiopische Eigentümlichkeit". However, the existence of this pattern in Tigre was not taken into consideration in the subsequent classification studies by Cohen, Leslau and Hetzron.

[23] Combination of the PS infinitive pattern **ḳatāl-* with the nisbah suffix **-iyy-* (proposed, e.g., in FOX 2003, pp. 182–183) is not unattractive, although one has to bear in mind that none of the two elements of such a reconstruction is synchronically attested in Geez: there is no trace of the use of **ḳatāl-* as the infinitive, whereas the nisbah suffixes are *-āy* and *-āwi* rather than *-i*. At the same time, FOX (2003, p. 179) is no doubt correct to observe that the use of **ḳatāl-* as an agent pattern is so rare throughout Semitic that it does not seem realistic to see a manifestation of such a use in the Geez *nomen agentis*.

[24] In Amharic, examples of this pattern are found already in the Royal Songs, such as *gäddälhu bay* (< **bahāli*) 'who says: I killed' from *alä* (< **bhl*) 'to say' (GUIDI 1889, p. 64, Royal Song No. X, dedicated to Zarʾa Yaʿqob, 15th cent.).

[25] Already in Old Amharic: *mälalaš yäwäsän* 'the changer of the borders' (GUIDI 1889, pp. 62–63, Royal Song No. VIII, dedicated to ʾAmda Seyon, 14th cent.).

The pattern *ḳatāli is also attested in Gafat (although Leslau considers it an Amharism): *wädaž* 'friend' < *wäddädä* 'to love' (Leslau 1956b, p. 111). For the rest of Outer SES languages, only a few scattered survivals at lexical level have been recorded, v. Hetzron 1972, p. 116, 1977, p. 110 for Gura (a variety of Čaha) and Ennemor[26].

In Tigre, the form *ḳatāl*, used to form *nomina agentis* (v. Raz 1983, p. 30), is obviously related to *ḳatāli of the rest of ES.[27] It is difficult to account for the disappearance of the element *-i* in the final position, but this element becomes transparent in the feminine form *ḳatālit* as well as in the plural form *ḳatālyām*. The pattern *ḳatāli*, also recorded by Raz, was familiar already to Littmann (1899, p. 90): *ḳatāli* 'murderer' < *ḳatla* 'to kill', *warāri* 'vanguard' < *warra* 'to fight, to attack' (v. Littmann 1913, p. 64, No. 82, lines 12, 13 as well as WTS 251, 433–434), *walādi* 'parent' (WTS 430).[28] The form *ḳatāl* co-exists with *ḳātəl* but is not functionally identical with it: the latter is employed as a true participle and forms part of the verbal paradigm, whereas the former is used to derive deverbal nouns: *saḥāt* 'sinner' < *saḥta* 'to do wrong' (another pattern, *ḳātlāy*, seems to be more widespread in this function, Raz 1983, p. 29).

Given the fact that *ḳātil-* is ubiquitous in Akkadian and Central Semitic,[29] there are good reasons to regard it as an important feature of Proto-Semitic nominal derivation. Its loss can be, therefore, quite meaningful from the point of view of genealogical classification, even if, methodologically, a shared loss is never as important as a shared innovation.[30]

---

[26] Remarkably, the Ennemor form *namaž* 'friend' < *nämädä* 'to love' goes back to *ḳātāli rather than *ḳat(t)āli.

[27] The authors are deeply grateful to Saleh Mahmud Idris (Eritrean Ministry of Education), who, as a native speaker of Tigre, drew their attention to the pattern *ḳatāl* in that language.

[28] Unlike *ḳatāl*, the form *ḳatāli* seems to be out of use nowadays (Saleh Mahmud Idris, personal communication).

[29] Fox 2003, pp. 237–243.

[30] One will not lose sight of the fact that *ḳātil-* is also missing from MSA. Potentially, that could be interpreted as an isogloss supporting the otherwise poorly documented (Huehnergard 2005, p. 161) South Semitic genealogical unity. Within such a paradigm, the fully fledged use of *ḳātil-* in Tigre can only be accounted for by an Arabic influence. The plausibility of such a hypothesis should be considered within the general picture of Arabic influences on Tigre outside lexical borrowings, a largely unexplored problem scheduled for a special study by the present authors. At present, it may be observed that the well-attested remnants of *ḳātil-* in Geez are hard to explain within such an approach so that one is inclined to conclude, at least provisionally, that there is no historical connection between the loss of *ḳātil-* in MSA and a similar process in ES.

4. A preliminary conclusion: Tigre vs. the rest of ES?

The three innovations discussed above may seem to provide enough evidence for postulating a binary opposition between Tigre and the rest of ES.

5. Conflicting evidence

Such a conclusion, however, may be premature in view of several isoglosses that seem to draw a line between Geez and the rest of ES (including Tigre).

5.1. "Composite" verbs

A classic example of a common ES innovation – undoubtedly due to the influence of the Cushitic substratum (Leslau 1945, p. 72, Tosco 2000, p. 346) – is the emergence of the so-called "composite" verbs, consisting of a non-inflected main ("lexical") element and an inflected auxiliary verb *bhl 'to say' (Appleyard 2001, Amberber 2002, pp. 85–90).[31] Such verbs are also widespread in Tigre. In Geez, however, "composite" verbs do not constitute a special verbal class, being rather attested in a limited number of examples, possibly calques from Cushitic. The Geez "composite" verbs quoted by Dillmann (LLA 484; v. also Hetzron 1972, p. 18) include ʔoho bəhla 'to obey', ʔoho ʔabala 'to persuade', bāḫa bəhla 'to greet', ʔənbəya bəhla 'to refuse', ṣaṭṭ bəhla 'to be quiet' (cp. also ʔəh bəhla 'to groan' in CDG 12, absent from LLA). Most of them occur in works commonly dated to the Aksumite period. Moreover, one "composite" verb is most probably found in a Geez inscription as early as the 4th century: w-z-m / [..]-m / yb-m (RIE 186:6) has been reconstructed as w-z-m / ʔh-m / yb-m and interpreted as wa-za ʔoho yəbe 'and who said "yes"' (i.e., 'and who agreed') by Littmann (1913, p. 21).

5.2. Frequentative *ḳatātala

This stem, traditionally called frequentative, is used to express such meanings as iterative, intensive, augmentative and attenuative (Leslau 1939, p. 15): Amh. gädaddäfä 'to make several mistakes or omissions' < gäddäfä 'to make a mistake', Wol. ṭəbābäsä 'to fry a little bit (very fast)' < ṭäbäsä 'to fry', etc. As duly observed in Leslau 1960, p. 93, this stem is a productive means of verbal derivation practically throughout ES (including Tigre), but not in

---

[31] "Composite" verbs employing other auxiliaries, with such meanings as 'to do', 'to become', etc., are also frequently found in ES.

Geez. Still, a few verbal forms using this pattern are in fact attested in Geez too (Leslau 1939, p. 16): *tamayāyaṭa* 'to turn hither and thither' < *meṭa* 'to turn' (LLA 216, CDG 377), *tamalālasa* 'to go to and fro' (LLA 146, CDG 345, not in the basic stem in Geez), *tadamāmara* 'to mingle with' < *dammara* 'to insert, add' (LLA 1087, CDG 135), *taʕamāmaḵa* 'to engage too deeply in' < *ʕamaḵa* 'to be deep' (LLA 956, CDG 63). Of these four verbs, all recorded in LLA as real lexemes used in Geez texts, only one (*tamayāyaṭa*) is described by Dillmann as having been used in Aksumite texts (Gen. 3:24, Prov. 8:20; also in post-Aksumite works such as *Fətḥa Nagaśt* and *Zena Ayhud*). For each of the remaining three verbs, Dillmann gives only one example, each of them, peculiarly, from one and the same post-Aksumite work *Filkəsyos*. But even the verb *tamayāyaṭa* may be a post-Aksumite phenomenon: significantly, it appears only in manuscripts C, G, and R of Gen. 3:24 used in Boyd's edition (1909, p. 9), whereas the older manuscripts have the non-reduplicated form *tətmayyaṭ*.

Another piece of evidence for the presence of this pattern in Aksumite Geez could be seen in the verb *taḵābabala* 'to receive frequently' < *taḵabbala* 'to go out to meet, receive' (LLA 435, CDG 418). The only example quoted by Dillmann, coming from *The Shepherd of Hermas* (Aksumite period), is *taḵābabala* – an orthographic variant of *taḵabābala*.[32] However, the corresponding passages in ms. B (ms. fot. 133 della Vaticana) used by Raineri (1993, p. 438) exhibit regular *ta*-forms of the geminated stem, and it may well be that the reduplicated forms do not reflect the original version.

A still more dubious form is *hababāli* (instead of *ḥabābāli*) 'deceitful', presumably a *nomen agentis* from **ḥabābala* < *ḥabala* 'to act craftily, deceive', attested in a post-Aksumite text *Faws Manfasāwi* (according to CDG 223, taken from Amharic).

Some further examples of the frequentative stem in Geez are recorded in CDG but not in LLA: *ḍamāmara* 'to add to one another' < *ḍamara* 'to unite' (CDG 150), *tasamāməʕa* 'to agree with each other' (CDG 501) < *samʕa* 'to hear'.

5.3. Causative in ʔat-

Perhaps the most important isogloss shared by Tigre, Tigrinya and SES as opposed to Geez is the causative prefix *ʔat-* (Cohen 1931, pp. 23-24, Leslau 1951, No. 19, 1960, p. 93, Hetzron 1972, p. 17, Goldenberg 1977, pp. 498–499). In most languages, this prefix is used alongside *ʔa-*, and dif-

---

[32] For the alternation *ḵa/ḵā* in this text v. already König 1877:134. Alternations between the 1st and 4th order of *b* (ብ and ባ) and other "two-legs"-letters (ሱ and ሳ, etc.) are quite common in the early manuscripts (Zuurmond 1989, p. 27).

fers from it either in distribution (restricted to verbs with historical initial laryngeal), or in semantics (denoting indirect causative/adjutative).

It seems that these two phenomena – the use of ʔat- as an allomorph of the causative ʔa- conditioned by the first radical laryngeal, and its use as a separate morpheme functionally opposed to ʔa- – correlate with two historically different types of ʔat-, although both are eventually extensions of the standard causative marker ʔa-.

In the former ("allomorphic") function, -t- is to be regarded as an epenthetic consonant filling the hiatus between two vowels resulting from the loss of laryngeals in the SES languages.[33] This function is clearly reminiscent of a few other examples of -t- as a sort of "consonantal glide" in ES and elsewhere in Semitic (v. fn. 18). In such a context, it is interesting to observe that frequent appearance of ʔat- instead of ʔa- before laryngeals is also reported for Tigre (Raz 1983, p. 58), where two subsequent laryngeals are often – although not always – avoided (as in ʔatḥalafa 'to cause to pass' < ḥalfa 'to pass', WTS 58).[34] The similarity to the SES picture is evident but no diachronic explanation for this coincidence is at hand.[35]

The second ("morphological") function must have emerged from the combination of the causative prefix *ʔa- with the reflexive/passive/reciprocal marker *ta-. Examples where this complex origin of *ʔat- is still quite transparent can be found more or less throughout modern ES: Tgr. ʔatlaḥama 'to join together, to close' < təlaḥama 'to be joined together, compact' (WTS 58), Tna. ʔazzaräbä 'to cause, allow to speak' < täzaräbä 'to speak, talk to one another, to converse' (KT 1972),[36] Amh. alläwawwäṭä 'to help change' < täläwawwäṭä 'to change', akkassäsä 'to help to suit one another' < täkassäsä 'to suit one another') (K 101, 1406), Arg. awwažža 'to cause to talk' < (*ta-stem) əwwažža 'to talk' (Leslau 1997, p. 76), Sod. atgaddälä- 'to make kill each other' < tägaddälmu- 'to kill each other' (Leslau 1968, p. 18). A

---

[33] In SES, only Amharic, Argobba and Selti do not employ ʔat- in this function: Amharic and Argobba make use of *ʔas- instead, whereas in Selti *ʔat- is the main causative marker compatible with virtually any root regardless of its phonetic shape.

[34] In the causative stems of Tigre, two different ways of dealing with the unwelcome sequence *ʔa-H are actually attested: the t-insertion described above, and metathesis accompanied by vocalic lengthening (*ʔa-H- > *Hā-): ḥālafa 'to cause to pass'.

[35] The situation in Tigrinya is different: here, verbs with an initial laryngeal radical freely take the causative prefix ʔa- (as in ʔaʔbäyä < ʔabäyä 'to refuse', KT 1465).

[36] In Tigrinya, the t of the prefix *ʔat- is normally assimilated to the first radical of the verb, unless the first radical is a laryngeal. In the latter case, according to Leslau (1941, p. 104), the prefix ʔat- appears as ʔattä-. However, Leslau admits that a lot of regular verbs allow free variation between *ʔat- and ʔattä- (ʔannakäsä / ʔattänakäsä 'to cause to attack each other'). One can thus suggest that ʔattä- is not an allomorph of ʔat-, but rather an independent prefix (whose semantics must be very close to that of ʔat-), cognate to Tigre indirect causative prefix ʔatta-.

causative derived from passive forms could rather naturally be understood as indirect causative, which may account for the emergence of the prefix *ʔat- as an independent morpheme. The new status of *ʔat- can be illustrated by many *ʔat-verbs with no ta-prototypes: Tna. ʔaḳḳaläwä 'to help roast' < ḳäläwä, ḳaläwä, ḳoläwä 'to roast (meat; grain)' (KT 897), Zwy. ʔatnīḳəl 'to make sth. be taken' < näḳäl 'to take' (MEYER 2005, p. 199), Gaf. atriggäṣä 'to make dance' < räggäṣä 'to dance' (LESLAU 1956b, p. 116; v. also UENO 2001, pp. 116–117 for Chaha).[37]

In Tigre, Tigrinya and a number of SES languages, a combination of *ʔat- and the C-stem is used to derive adjutatives (v. PALMER 1960, pp. 112–114 for Tigrinya, AMBERBER 2003, p. 41 for Amharic, HETZRON 1977, p. 72 for *Gunnän*-Gurage). Furthermore, in all SES languages except for Amharic, Argobba and Selti, *ʔat- is an independent causative morpheme semantically opposed to *ʔa- (the opposition is usually realized as direct vs. indirect causative, although other patterns can also be observed). As mentioned above, *ʔat- becomes the main causative marker in Selti (atḵēra 'to make read' < ḳara 'to read', GUTT 1997, p. 935), relegating *ʔa- to a few lexicalized formations. In Amharic and Argobba, the indirect causative is expressed by as- rather than at-[38]. The "morphological" *ʔat- appears in these two languages as a combination of *ʔa- and *ta-, and, in Amharic, in the aforementioned adjutative pattern.

Neither "allomorphic", nor "morphological" *ʔat- is recorded for Geez, where the prefix ʔasta- does however exhibit a certain functional similarity to the "morphological" *ʔat- in modern ES: as WALTISBERG's comprehensive study shows (2001, especially pp. 72–75), almost a half of ʔasta-verbs in Geez are derived from ta-prefixed stems. The diachronic relationship between ʔasta- and *ʔat- is, at present, obscure.

5.4. Patterns of the infinitive

Several ES languages use the suffix *-o(t) to produce infinitives: Geez (*nagir-o(t)* 'to speak', *faṣṣəm-o(t)* 'to complete'[39]), Ancient Harari (*limād-ōt* 'to learn', CERULLI 1936:361) and East Gurage (Sel. *nikat-ōt* 'to hit', Wol. *nəkäs-ōt* 'to bite'). This type of infinitive is likely related to the infinitive

---

[37] In many of such cases *ʔat- is combined with the features of B or C types in spite of the fact that the original verb belongs to the A type. This may indicate that the merger of the A and B types in the imperfect/jussive of the ES verbs with the prefix ta-, analyzed by WAGNER (1968, pp. 207–208) as an independent process in several ES languages, is in fact a more ancient, perhaps common ES phenomenon. V. also HUDSON 1991, p. 686 for an alternative, less likely, explanation.

[38] Cp. fn. 33. For the function of as- in Amharic v. AMBERBER 2002, pp. 42–53.

[39] Possible diachronic background of the element -t- is discussed in fn. 18.

forms in Peripheral Western Gurage, which are formed with the circumfix *ä-…-t* combined with internal labialization and final palatalization: Enm. *ä-kŭfʷč-t* 'to open' < *käfädä* 'he opened' (the element *ä-* is thought to go back to the preposition **la-* 'for', whereas the internal labialization is seen as a continuation of the vowel in the original suffix **-ot*). The suffix *-ot* is also attested in Tigre among the morphemes for forming the infinitives (or, rather, verbal nouns similar to Arabic masdars) of the derived stems, e.g. *saddak̟-ot* 'to sacrifice' (type B). Also in the A type, the suffix *-o* combined with the pattern *k̟ətl-* is one of many possibilities employed to form verbal nouns (*bəšlo* 'to boil'). Thus, the infinitive in *-o(t)* is shared by Tigre, Geez, and a number of SES languages, but is absent from Tigrinya. At the same time, an alternative infinitive pattern in **m*V-, absent from Geez, is found in Tigre, Tigrinya and most of SES.

Three possible conclusions can be drawn from this evidence, each having a different implication for genealogical classification.

The infinitive in *-o(t)* may be considered as the most archaic pattern reflecting the Proto-ES picture,[40] whereas the infinitive in **m*V- could be treated as an innovation shared by Tigre, Tigrinya (where the old infinitive is completely ousted by the new one) and SES, opposing these languages to Geez (v. COHEN 1931, p. 33 and LESLAU 1951, No. 13). Within such an approach, one can hardly exclude the possibility of independent innovations in individual languages or an areal spread of the pertinent patterns: note, on the one hand, that derived nouns in *m*V- functioning as the main infinitive pattern are widely attested in Aramaic which is geographically and genealogically remote from ES (HUEHNERGARD 1996, pp. 271–272)[41] and, on

---

[40] The origin of the morpheme *-o(t)* is perhaps to be sought in the Cushitic suffix *-o*, as suggested in LESLAU 1945, p. 68. Attempts to explain it as an internal development within Semitic, either as generalization of the contracted endings in roots with final *w* or as a cognate to the abstract noun suffix *-ūt* in Aramaic and Akkadian (BARTH 1894, pp. 407–411, BROCKELMANN 1908, p. 401) are less convincing.

[41] Generally speaking, the history of the infinitive in Aramaic may be instructive for a proper diachronic evaluation of the ES picture. Infinitives in *m*V-, ubiquitous in Middle Aramaic, are scarcely attested both before and after this stage. In modern Aramaic, infinitives go back to the verbal noun **k̟atāl-* (FOX 2003, pp. 185–186), an isogloss which unites such otherwise quite distant Neo-Aramaic languages as Maalula and Turoyo (ARNOLD 1990, p. 330, JASTROW 1993, p. 115). The *m*V-infinitives are generally missing, but not without leaving a trace (for Turoyo, v. such examples as *mamro* 'to say' or *mazlo* 'to go' in JASTROW 1993, p. 115, which suggest unmistakably that the change of the pattern of the infinitive did actually take place). In Old Aramaic, non-prefixal infinitives are normal (the corresponding morphological patterns being of course unknown because of the lack of vocalization), but *m*V- formations are attested in the earliest Old Aramaic inscription of Tell Fakhariyye (HUEHNERGARD 1996, p. 271). All this probably suggests that the formation of the infinitives is not the strongest aspect of Semitic morphology on which genealogical classification strategies should be built.

the other hand, that the shift from -*o(t)* to *m*V- infinitives in the history of Harari is recent and most likely due to foreign (Amharic) import.

If the infinitive in **m*V- is thought to be more ancient (so Hetzron 1972, p. 21), the suffix -*o(t)*, attested in Tigre, Geez and SES, must be an innovation, most probably a shared one in view of its non-trivial nature. This isogloss would oppose Tigrinya to the rest of ES.

The third possibility, namely, reconstruction of both types of infinitive for Proto-ES, with subsequent marginalization and loss of one of them in favor of the other in individual daughter languages, is not to be excluded either. In such a case, neither *-*o(t)* nor **m*V- should be regarded as truly innovative. The Proto-ES picture would then be similar to one observable in contemporary Tigre, which possesses a rich collection of morphological patterns to form verbal nouns, of which those with -*o(t)* or *m*V- are not even the most frequently used.[42] One verb can have several forms of infinitive, a situation strongly reminiscent of the Arabic system of masdars. It is thus tempting to suppose that Tigre reflects the Proto-ES picture, in its turn similar to the Arabic one.[43] One could interpret in this sense also the fact that in a number of ES languages -*o(t)* and *m*V- infinitives are attested side by side (e.g. Čaha *mä-gdəd > *wä-gdəd* and *gədəd-ot* 'to tear'), whereas in Tigre they can even be combined within one form: *ma-nkas-o* (causative stem, A type) 'to take away'. Similarly, in Zway, patterns with the prefix *wə-* (< **mä-*) can be optionally expanded with the suffixes -*t* or -*āt*: *wə-dläs* 'to wait' vs. *wə-čeṭā-t* 'to be tired'.

6. Conclusions and ways of further research

The perception of Tigre as the most archaic ES language is by no means new (for a summary of the discussion concerning the position of Tigre in relation to Tigrinya and Geez v. Hetzron 1977, pp. 17–18). However, Hetzron's pattern of ES classification does not pay enough attention to this question, and, to the best of our knowledge, no serious attempt at investigating the exact genetic position of Tigre using Hetzron's methods has been so far undertaken.

---

[42] Thus, for the basic stem the following types of verbal nouns are adduced by Raz (1983, p. 30): *ḳatil* (*saḥil* 'to whet, sharpen'), *ḳətlat* (*səmrat* 'to please'), *ḳətlo* (*bəšlo* 'to boil'), *məḳtāl* (*mərgāṣ* 'to tread with the feet'), *ḳətle* (*ḳərbe* 'to be near'), *ḳatəl* (*nagəf* 'to escape'), *ḳətlān* (*ləfḳān* 'to sew'). A few other patterns can be drawn from WTS, e.g., *ḳətlā* (*məšrā* 'to keep back some milk [of cow when milked]').

[43] Potentially, the diversity of verbal noun patterns in Tigre may even be seen as a result of Arabic influence rather than a Proto-ES archaism. Such a possibility requires further investigation (v. fn. 30).

Several important innovations in the domain of verbal morphology, in which all ES languages except Tigre participate, may give a new meaning to the statement concerning its archaic nature: starting from these innovations, one can suggest that Tigre was the first language to separate from the common ES stock, being thus opposed to the rest of ES. Within such a paradigm, the period prior to separation of SES can be reconstructed in the following way:
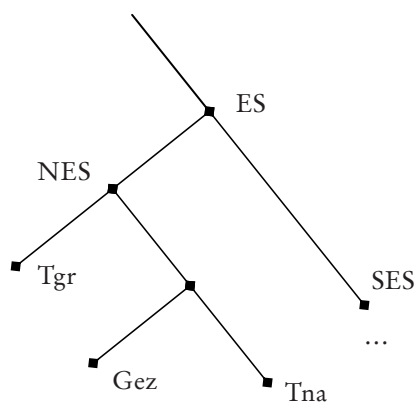
I:

ES

Tgr   Gez – Tna – SES

Gez?   Gez – Tna – SES

Tna?   SES

…
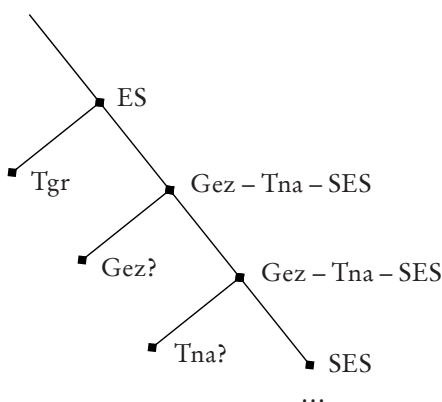
This reconstruction differs from the trees proposed by Hetzron (a: 1972, p. 119; b: 1977, p. 17):

IIa:

ES

NES

Gez   SES

Tgr   …

Tna

IIb:

ES

NES

Tgr   SES

Gez   …

Tna
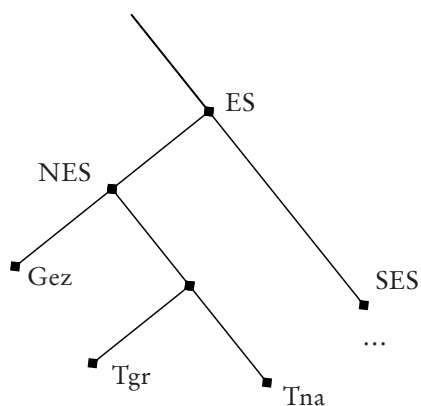
In the framework of reconstruction I, we do not venture any positive state-ments concerning the development of the ES languages after proto-Tigre separated from the common stock. One can tentatively suppose that the next

language to split off was Geez, which would imply postulating a common Tigrinya-SES stage. At present, we can offer only one argument in support of this hypothesis, namely, the emergence of the benefactive suffix -*l*-, present in all ES, except for Tigre and Geez: Tna. *dorho ḥarädällu* 'he slaughtered a chicken for him', Amh. *färrädälläw* 'he judged in his favour'.[44] Further research may shed more light on this matter.

As section 5 of the present contribution shows, our reconstruction I is not unproblematic in view of a certain number of conflicting isoglosses. The value of these isoglosses is of course uneven.

The first one – composite verbs – is the easiest to discard, as there are reasons to suppose that the innovation as such is Proto-ES, and its marginal presence in Geez vs. its wide spread elsewhere is due to the long chronological gap between Classical Ethiopic and the modern languages. Similarly, one should probably not attach too much importance to the fact that Geez has no *m*V-infinitives.

The other two features are considerably more problematic, however.

The sparse examples of *ḳatātala in Geez look like infiltrations from modern ES rather than incipient manifestations of a common ES feature. A shared innovation by all languages except Geez is the readiest explanation for this picture, and no good alternative is presently at hand.[45] Similarly,

---

[44] For its reflex -*n(n)*- in *Gunnän*-Gurage (Muh. *gäffa-na-* 'he pushed for her') v. Hetzron 1977, p. 60.

[45] The emergence of this pattern is usually attributed to the influence of Cushitic (Leslau 1945, p. 71, 1956b, p. 71). Indeed, frequentative as a grammatical category is common in various branches of Cushitic, and usually employs reduplication of the whole verbal stem or a part of it: v. Palmer 1957, p. 157 for Bilin, Zelealem Leyew 2003, p. 202 for Kemant (admittedly attributed to the Amharic influence by the author, v. ibid. p. 203), Hetzron 1976, pp. 31–32 for Agaw in general, Hudson 1976, p. 118 for Bedja, Bliese 1976, p. 144 for Afar. Nevertheless, the possibility of independent Cushitic borrowings in individual ES languages is excluded: the frequentative patterns in Cushitic exhibit a great deal of morphological variation and, significantly, none of them corresponds exactly to what is observed in ES. Conversely, the ES frequentative pattern *ḳatātala is remarkably uniform and well preserved throughout ES, which cannot be accidental. In such a context, one should not neglect the existence of the verbal stem with a reduplicated middle radical in Minaean. As far as one can judge from Arbach 1993, p. 24, there are seven reliable examples of this pattern: *ʔḫḫr* 'to impose', *ʕlly* 'to raise', *fnnw* 'to send', *frrʕ* 'to send', *s₁kky* 'to irrigate', *ṭwwr* 'to wall up' and *mhhr* 'to fix a payment'. Since orthographic reduplication is unlikely to render gemination in ESA, a structural identity with the Ethiopian frequentative is likely (Nebes/Stein 2004, p. 471, Kogan/Korotaev 2007, pp. 182–183). This identity might be interpreted in the sense that reduplicated frequentative was a feature of the (presumably, Arabian) ancestor tongue of ES languages, preserved in modern ES (perhaps under Cushitic influence), but lost in Geez – a historical development which is chronologically somewhat problematic but not *a priori* impossible. Needless to say, it would be of great importance to ascertain whether there is also some sort of *functional* similarity between the reduplicated stem in Minaean and ES (as assumed by Höfner 1943, pp. 86–87, Leslau 1939, p. 31, 1943, p. 8, etc.). Most subsequent scholars found no

however problematic the etymological relationship between the prefixes *ʔasta-, *ʔat- and *ʔas- may be,[46] one has to acknowledge that what has been labeled above "morphological" *ʔat- does look like a common innovation shared by Tigre, Tigrinya and SES, but one not affecting Geez.

Significantly, the last two isoglosses point in one and the same direction: they oppose Geez to all modern ES, as shown by the following diagram:

III:
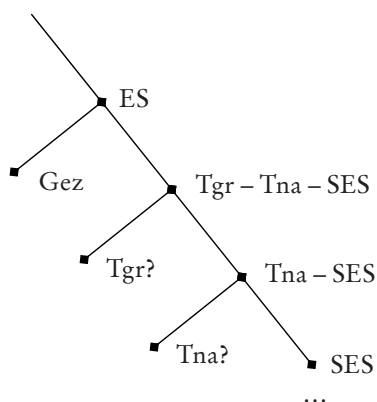
It is easy to observe that isoglosses supporting reconstruction (I) and reconstruction (III) exhibit, all contradictory points notwithstanding, one thing in common: both clearly exclude the possibility of treating Geez, Tigre and Tigrinya as a historical unity. This negative conclusion seems to be the most reliable outcome of our analysis, although one cannot exclude that further research will make it more vulnerable than it may look at present.[47]

---

frequentative nuance in the available Minaean contexts (Ryckmans 1943, pp. 140–141, Beeston 1962, pp. 20–21, followed by Marrassini 1991, p. 1017). As Ryckmans argues, at least in one relevant passage (RES 2771:5) the frequentative meaning is in fact ill-fitting (… *wywm / ʕs₁y / wbny / wfrrʕ byts₁m / yhr / wmḫfdn* … 'et au temps où il entreprit et bâtit et acheva leur maison (temple?) Yahir et la tour').

[46] V., e.g., Conti Rossini 1923, pp. 466–467, Bergsträsser 1963, p. 115, and, for a contrary opinion, Cohen 1939, p. 235.

[47] Consider, for example, the general negation marker *ʔi-* which unites Geez and the Tigre of Mensa in opposition to Tigrinya (Hetzron 1972, p. 21). Similarly, the B-type conjugation of the present of quadriradical verbs ("Central Semitic type") is shared by Tigre and Tigrinya, the rest of ES using the "Akkadian type" (*a*-insertion after the second radical and gemination of the third radical (Gensler 1997, p. 238). Are we faced with shared innovations, archaisms, areal features or independent phenomena in these two cases? A further isogloss uniting Tigre and Tigrinya is the genetive marker *nāy (v. CDG 410 for its derivation from Geez *nəwāy* 'vessel; possessions', Tna. *nəway* 'personal estate; cattle'). The appearance of this feature in Tigre (where it is used alongside other, more widespread means of expressing the genitive relation) may be due to the influence of Tigrinya.

As already mentioned, the present contribution is restricted to the evidence of verbal morphology. Potentially relevant facts from other domains of morphology (as well as phonological and syntactic phenomena) have been provisionally left out of consideration. One cannot exclude that a deeper insight into these facts will bring further support to this or that aspect of the genealogical classification of Ethiopian Semitic. The chances are probably not very high, however, given the overall preponderance of verbal morphology in the present-day study of genealogical classification of Semitic.

Abbreviations of languages

Amh.	Amharic	MSA	Modern South Arabian
Arg.	Argobba	Msq.	Mesqan
EGH	Harari – East Gurage	Muh.	Muher
End.	Endegen	NES	North Ethio-Semitic
Enm.	Ennemor	Sel.	Selti
ES	Ethio-Semitic	SES	South Ethio-Semitic
Gaf.	Gafat	Sod.	Soddo
Gez.	Geez	Tgr.	Tigre
Gog.	Gogot	Tna.	Tigrinya
Gyt.	Gyeto	Wol.	Wolane
Har.	Harari	Zwy.	Zway

Sigla of lexicographic tools and text editions

CDG   W. Leslau: *Comparative Dictionary of Geʕez* (*Classical Ethiopic*). Wiesbaden 1987.

DAE   E. Littmann (ed.): *Deutsche Aksum-Expedition*. IV. *Sabäische, griechische und altabessinische Inschriften*. Berlin 1913.

EDH   W. Leslau: *Etymological Dictionary of Harari*. Berkeley/Los Angeles 1963.

K   Th. L. Kane: *Amharic-English Dictionary*. 2 vols. Wiesbaden 1990.

KT   Th. L. Kane: *Tigrinya-English Dictionary*. 2 vols. Springfield 2000.

WTS   E. Littmann/M. Höfner: *Wörterbuch der Tigrē-Sprache. Tigrē-Deutsch-Englisch*. Wiesbaden 1962.

LLA   A. Dillmann: *Lexicon Linguae Aethiopicae cum indice latino*. Lipsiae 1865 [repr. New York 1955].

RES   *Répertoire d'Épigraphie Sémitique*. Paris 1900–.

RIE   E. Bernand/A. J. Drewes/R. Schneider: *Recueil des inscriptions de l'Éthiopie des périodes pré-axoumite et axoumite*. Tome I: *Les documents*. Paris 1991.

References

AMBERBER, M. 2002: *Verb Classes and Transitivity in Amharic.* München.

APPLEYARD, D. 2001: "The verb 'to say' as a verb 'recycling device' in Ethiopian languages." In: A. ZABORSKI (ed.): *New Data and New Methods in Afroasiatic Linguistics. Robert Hetzron in memoriam.* Wiesbaden, pp. 1–11.

ARBACH, M. 1993: *Le maḏbien: Lexique, onomastique et grammaire d'une langue de l'Arabie méridionale préislamique.* Tome III. *Grammaire maḏbienne.* Aix-en-Provence (Thèse de doctorat. Université de Provence Aix Marseille I. Centre d'Aix.).

ARNOLD, W. 1990: *Das Neuwestaramäische.* V. *Grammatik.* Wiesbaden.

BARTH, J. 1894: *Die Nominalbildung in den semitischen Sprachen.* Leipzig.

BEESTON, A. 1962: *A descriptive Grammar of Epigraphic South Arabian.* London.

BERGSTRÄSSER, G. 1928: *Einführung in die semitischen Sprachen.* München.

BLIESE, L. 1976: "Afar." In: M. L. BENDER (ed.): *The non-Semitic Languages of Ethiopia.* Michigan, pp. 133–165.

BOYD, J. O. 1909: *The Octateuch in Ethiopic.* Part I. *Genesis.* Leyden.

BRAVMANN, M. M. 1969: "The Semitic Causative-Prefix š/sa." In: *Le Muséon* 82, pp. 517–522.

BROCKELMANN, C. 1908: *Grundriss der vergleichenden Grammatik der semitischen Sprachen.* I. *Laut- und Formenlehre.* Berlin.

CANTINEAU, J. 1932: "Accadien et sudarabique." In: *Bulletin de la Société de linguistique de Paris* 33, pp. 175–204.

CERULLI, E. 1936: *Studi Etiopici.* I. *La lingua e la storia di Harar.* Roma.

COHEN, M. 1931: *Études d'éthiopien méridional.* Paris.

— 1939: *Nouvelles études d'éthiopien méridional.* Paris.

CONTI ROSSINI, C. 1923: "Aethiopica." In: RSO 9, pp. 365–468.

DILLMANN, A. 1907: *Ethiopic Grammar.* Tr. by J. A. CRICHTON. London [repr. Amsterdam 1974].

FABER, A. 1997: "Genetic Subgrouping of the Semitic Languages." In: R. HETZRON (ed.): *The Semitic Languages.* London, pp. 3–15.

FLEMING, H. 1968: "Ethiopic language history." In: *Ethnohistory* 15, pp. 353–388.

FOX, J. 2003: *Semitic Noun Patterns.* Winona Lake.

GARAD, A./E. WAGNER 1998: *Harari-Studien. Texte mit Übersetzung, grammatischen Skizzen und Glossar.* Wiesbaden.

GELB, I. J. 1969: *Sequential Reconstruction of Proto-Akkadian.* Chicago.

GENSLER, O. 1997: "Reconstructing Quadriliteral Verb Inflection: Ethiopic, Akkadian, Proto-Semitic." In: JSS 42, pp. 229–257.

GOLDENBERG, G. 1977: "The Semitic Languages of Ethiopia and their Classification." In: BSOAS 40, pp. 461–507.

GREENBERG, J. H. 1952: "The Afro-Asiatic (Hamito-Semitic) Present." In: JAOS 72, 1–9.

GUIDI, I. 1889: "Le canzoni geez-amariña in onore di re abissini." In: *Rendiconti della Reale Accademia Nazionale dei Lincei, Classe di scienze morali, storiche e filologiche* ser. 4,5, pp. 55–66.

GUTT, E.-A. 1997: "Concise grammar of Silt'e." In: E. H. M. GUTT/HUSSEIN MO-HAMMED: *Silt'e-Amharic-English dictionary* (*with concise grammar by Ernst-August Gutt*). Addis Ababa, pp. 895–957.

HETZRON, R. 1976: "The Agaw Languages." In: *Afroasiatic Linguistics* 3, pp. 1–45.

— 1972: *Ethiopian Semitic. Studies in classification*. Manchester.

— 1977: *The Gunnän-Gurage Languages*. Napoli.

HÖFNER, M. 1943: *Altsüdarabische Grammatik*. Leipzig.

HUDSON, G. 1976: "Highland East Cushitic." In: M. L. BENDER (ed.): *The non-Semitic Languages of Ethiopia*. Michigan, pp. 232–277.

— 1991: "A- and B-type Verbs in Ethiopian and Proto-Semitic." In: A. S. KAYE (ed.): *Semitic Studies in Honor of Wolf Leslau on the Occasion of His Eighty-fifth Birthday.* 2 vols. Wiesbaden, vol. 1, pp. 645–651.

— 2003: "Ethiopian Semitic Negative Nonpast." In: M. L. BENDER/G. TAKÁCS/D. L. APPLEYARD (eds.): *Selected Comparative-Historical Afrasian Linguistic Studies in Memory of Igor M. Diakonoff*. München, pp. 209–218.

— 2007: "North and South Ethiopian Semitic." In: R. VOIGT (ed.): *From Beyond the Mediterranean (Akten des 7. internationalen Semitohamitistenkongresses, Berlin, 2004)*. Berlin, pp. 339–348.

HUEHNERGARD, J. 1983: "Asseverative **la* and hypothetical **lu/law* in Semitic." In: JAOS 103, pp. 569–593.

— 1995: "What Is Aramaic?" In: ARAM 7, pp. 261–282.

— 2005: "Features of Central Semitic." In: A. GIANTO (ed.): *Biblical and Oriental Essays in Memory of William L. Moran*. Roma, pp. 155–203.

JASTROW, O. 1993: *Laut- und Formenlehre des neuaramäischen Dialekts von Mīdin im Ṭūr ʕabdīn*. Wiesbaden.

JOHNSTONE, T. M. 1980: "Gemination in the Jibbāli Language of Dhofar." In: ZAL 4, pp. 61–71.

KAPELIUK, O. 1997: "Reflections on the Ethio-Semitic Gerund." In: KATSUYOSHI FUKUI/EISEI KURIMOTO/MASAYOSHI SHIGETA (eds.): *Ethiopia in Broader Perspective. Papers of the XIIIth International Conference of Ethiopian Studies*. Vol. I. Kyoto, pp. 492–498.

KOGAN, L. 2005: "Common Origin of Ethiopian Semitic – the Lexical Dimension". In: D. NOSNITSIN et al. (eds.): *Varia Aethiopica. In Memory of Sevir B. Chernetsov*. Saint-Pétersbourg, pp. 367–396.

KOGAN, L./A. KOROTAEV 2007: "Epigraphic South Arabian Morphology." In: A. KAYE (ed.): *Morphologies of Asia and Africa*. Winona Lake, pp. 167–192.

KÖNIG, E.: *Neue Studien über Schrift, Aussprache und allgemeine Formenlehre des Aethiopischen*. Leipzig 1877.

LESLAU, W. 1939: "Le thème verbal fréquentatif dans les langues éthiopiennes." In: RES 2, pp. 15–31.

— 1941: *Documents tigrigna (éthiopien septentrional)*. Paris.

— 1943: "South-East Semitic (Ethiopic and South Arabic)." In: JAOS 63, pp. 4–14.

— 1945: "The Influence of Cushitic on the Semitic languages of Ethiopia: a Problem of Substratum." In: *Word* 1, pp. 59–82.

— 1951: "Archaic features in South Ethiopic." In: JAOS 71, pp. 212–230.

— 1953: "The Imperfect in South-East Semitic." In: JAOS 73, pp. 164–166.
— 1956a: "Arabic Loanwords in Tigre." In: *Word* 12, pp. 125–141.
— 1956b: *Étude descriptive et comparative du Gafat (éthiopien méridional)*. Paris.
— 1957: "Une hypothèse sur la forme primitive du type B en amharique." In: *Word* 13, pp. 479–488.
— 1960: "Sketches in Ethiopic Classification." In: *Atti del convegno internazionale di studi etiopici (Roma 2–4 aprile 1959)*. Roma, pp. 89–107.
— 1968: *Ethiopians Speak. Studies in Cultural Background.* III. *Soddo*. Berkeley/ Los Angeles.
— 1981: "Additional Arabic loanwords in Tigre." In: R. G. Stiegner (ed.): *Al-Hudhud. Festschrift Maria Höfner zum 80. Geburtstag*. Graz, pp. 171–198.
— 1995: *Reference Grammar of Amharic*. Wiesbaden.
— 1997: *Ethiopic Documents*: *Argobba. Grammar and Dictionary.* Wiesbaden.
Littmann, E. 1898: "Das Verbum der Tigresprache." In: ZA 13, pp. 133–178.
— 1899: "Das Verbum der Tigresprache. Schluss." In: ZA 14, pp. 1–102.
— 1913: *Publications of the Princeton Expedition to Abyssinia*. Vol. III. *Lieder der Tigrē-Stämme*: *Tigrē Text*. Leiden.
Lonnet, A. 1993: "Quelques résultats en linguistique sudarabique moderne." In: *Quaderni di studi arabi* 11, pp. 37–81.
Lonnet, A./M.-C. Simeone-Senelle 1997: "La phonologie des langues sudarabiques modernes." In: A. Kaye (ed.): *Phonologies of Asia and Africa*. Vol. I. Winona Lake, pp. 337–372.
Marrassini, P. 1991: "Some Observations on South Semitic." In: A. S. Kaye (ed.): *Semitic Studies in Honor of Wolf Leslau on the Occasion of His Eighty-fifth Birthday*. 2 vols. Wiesbaden, vol. 2, pp. 1016–1023.
— 2006: "Le sud-sémitique entre généalogie, géographie et développment parallèle." In: A. Mettouchi/A. Lonnet (eds.): *Les langues chamito-sémitiques (afroasiatiques)*. Vol. 2. Ophrys, pp. 217–234.
Meyer, R. 2005: *Das Zay. Deskriptive Grammatik einer Ostguragesprache (Äthiosemitisch)*. Köln.
— 2006: *Wolane. Descriptive Grammar of an East Gurage Language (Ethiosemitic)*. Köln.
Murtonen, A. 1967: *Early Semitic. A Diacronical Inquiry into the Relationship of Ethiopic to the Other So-called South-East Semitic Language*. Leiden.
Nebes, N./P. Stein 2004: "Ancient South Arabian." In: R.D. Woodard (ed.): *The Cambridge Encyclopedia of the World's Ancient Languages*. Cambridge, pp. 454–487.
Palmer, F.R. 1957: "The Verb in Bilin." In: BSOAS 19, pp. 131–159.
— 1960: "The 'Derived Forms' of the Tigrinya Verb." In: *African Language Studies* 1, pp. 109–116.
Polotsky, H.J. 1938: "Études de grammaire gouragué." In: *Bulletin de la Société de linguistique de Paris* 39, pp. 137–75.
— 1949: Review of W. Leslau: *Gafat Documents*: *Records of a South-Ethiopic Language*: *Grammar, Text and Comparative Vocabulary*. New Haven 1945. In: JAOS 69, pp. 36–41.

Praetorius, F.: *Aethiopische Grammatik*. Karlsruhe/Leipzig 1886 [repr. New York 1955].

Raineri, O. 1993: "Il Pastore di Erma nel secondo testimone etiopico." In: *Orientalia Christiana Periodica* 59, pp. 427–464.

Raz, Sh. 1983: *Tigre Grammar and Texts*. Malibu.

— 1977: "Complex Verbal Expressions of Time-Relations in Tigre." In: *Israel Oriental Studies* 7, pp. 144–172.

Rundgren, F. 1959: *Intensiv und Aspektkorrelation. Studien zur äthiopischen und akkadischen Verbalstammbildung*. Uppsala/Wiesbaden.

— 1963: *Erneuerung des Verbalaspekts im Semitischen*. Uppsala.

Ryckmans, G. 1943: "Une grammaire des anciens dialectes de l'Arabie méridionale." In: *Le Muséon* 56, pp. 137–145 [review of M. Höfner: *Altsüdarabische Grammatik*. Leipzig 1943].

Tosco, M. 2000: "Is There an 'Ethiopian Language Area'?" In: *Anthropological Linguistics* 42, pp. 329–365.

Simeone-Senelle, M.-C. 1997: "The Modern South Arabian Languages." In: R. Hetzron: *The Semitic Languages*. London, pp. 378–423.

Ueno, M. 2001: "On *at*-Causatives of Transitive Verbs in Chaha." In: *Proceedings of the twenty-seventh annual meeting of the Berkeley Linguistics Society, Special Session on Afroasiatic Languages*. Berkeley, pp. 109–121.

Voigt, R. M. 1990: "The Gemination of the Present-Imperfect Forms in Old Ethiopic." In: JSS 35, pp. 1–18.

— 2007: "North vs. South Ethiopian Semitic." Paper presented at the 16th International Conference of Ethiopian Studies, Trondheim, 2–7 July 2007.

von Soden, W. 1970: Review of Gelb 1969. In: JNES 29, pp. 202–207.

Wagner, E. 1968: "Drei Miszellen zum südostemitischen Verbum." In: *Wissenschaftliche Zeitschrift Universität Halle* 17, pp. 207–215.

— 1983: *Harari-Texte in arabischer Schrift mit Übersetzung und Kommentar*. Wiesbaden.

— 1997: "Harari." In: R. Hetzron (ed.): *The Semitic Languages*. London, pp. 486–508.

Waltisberg, M. 2001: *Die St-Stämme des Altäthiopischen*. München.

Zelealem Leyew 2003: *The Kemantney Language*. Köln.

Zuurmond, R. 1989: *Novum Testamentum Aethiopice*: *The Synoptic Gospels*. Stuttgart.